another suitable processor. The correlation calculation can be performed p times, comparing a selected measured part to each of the p measured parts in the test data **202** (FIG. **2**). In some examples, the selected measured part need not be compared to itself, so there may be (p−1) comparisons. The p (or p−1) comparisons can produce p (or p−1) correlation values. Next, display module **114** (FIG. **1**) can display, on a user interface, at least one of the plurality of correlation values and at least one identifier of a respective manufactured part.

[0047] FIG. **6** shows an example of a user interface **600**, which can allow for selections from a user and can display at least one of the plurality of correlation values and at least one identifier of a respective manufactured part to the user, in accordance with some embodiments. User interface **600** is but one example; other suitable user interfaces can also be used.

[0048] User interface **600** can include a part selection element **602**, which can receive, from the user, a selection of a selected manufactured part, from a plurality of manufactured parts. In the example of FIG. **6**, part selection element **602** can include an area, into which a user can type an identifier associated with a particular manufactured part. In the example of FIG. **6**, a user has entered identifier **5705**, so that the system can analyze the manufactured part identified by number **5705**. In other examples, the part selection element **602** can include a list of available parts, and can prompt a user to select a part from the list. Other suitable mechanisms can also be used to receive the selection of the selected manufactured part.

[0049] User interface **600** can include a physical property selection element **604**, which can allow a user to specify which physical properties' measurements are included in the test data. In some examples, the physical property selection element **604** can include check boxes for each physical property, along with Check All and Uncheck All boxes, which can allow a user to select one or any combination of physical properties (and their corresponding measurements) to include in the test data. In some examples, such as in FIG. **6**, the physical property selection element **604** can include categories, each of which can include more than one physical property. For instance, examples of categories can include Balanced, Unbalanced, Old Balance, Reduced Field of View, and Old Pitch. Each of these categories can refer to a particular group of quantities pertaining to the manufactured part.

[0050] User interface **600** can include a single-part console **606**, which can visually display a plot of the normalized data for the specified manufactured part. In some examples, the single-part console **606** displays only the selected measurements from the physical property selection element **604**. In other examples, the single-part console **606** displays all the measurements but highlights the selected measurements from the physical property selection element **604**. In some examples, the single-part console **606** can allow a user to superimpose data from more than one manufactured part.

[0051] User interface **600** can include a results display **608**, which can display at least one of the plurality of correlation values and at least one identifier of a respective manufactured part. In the example of FIG. **6**, the results display **608** shows a row number, an identifier, a test start time, and a correlation value for the displayed manufactured parts. In the example of FIG. **6**, the results display **608** shows results for parts having the highest-ranking correlation values. In the example of FIG. **6**, the results are sorted by descending value of correlation value. In some examples, the results display **608** can allow for sorting by one of the other displayed quantities, by ascending or descending value. In some examples, the results display **608** can allow for selection of how many results to display, and can allow for scrolling through the displayed results.

[0052] FIG. **7** shows an example of a method **700** for identifying manufactured parts, in accordance with some examples. Method **700** can be executed on at least one processor executing instructions on a system, such as **100** (FIG. **1**). Method **700** is but one method for identifying manufactured parts; other suitable methods can also be used.

[0053] At operation **702**, the processor can provide a user interface to a user, the user interface including user interface elements to allow for selections from the user.

[0054] At operation **704**, the processor can receive from the user, on the user interface, a selection of a selected manufactured part, from the plurality of manufactured parts.

[0055] At operation **706**, the processor can retrieve, from the server, test data for the plurality of manufactured parts.

[0056] At operation **708**, the processor can normalize the retrieved test data against respective historical means and respective historical standard deviations to form normalized test data.

[0057] At operation **710**, the processor can correlating the normalized test data for the selected manufactured part with the normalized test data for each of the other manufactured parts in the plurality to form a plurality of correlation values. Each correlation value can represent a degree of similarity between the selected manufactured part and a respective manufactured part of the plurality.

[0058] At operation **712**, the processor can display, on the user interface, at least one of the plurality of correlation values and at least one identifier of a respective manufactured part.

[0059] In some examples, method **700** can further include ranking the plurality of manufactured parts in descending order of correlation value. In some examples, method **700** can further include displaying, on the user interface, identifiers of the plurality of manufactured parts in the ranked order. In some examples, method **700** can further include designating highest-ranked manufactured parts as having the same failure mechanism as the selected manufactured part.

[0060] Some embodiments may be implemented in one or a combination of hardware, firmware and software. Embodiments may also be implemented as instructions stored on a computer-readable storage device, which may be read and executed by at least one processor to perform the operations described herein. A computer-readable storage device may include any non-transitory mechanism for storing information in a form readable by a machine (e.g., a computer). For example, a computer-readable storage device may include read-only memory (ROM), random-access memory (RAM), magnetic disk storage media, optical storage media, flash-memory devices, and other storage devices and media. In some embodiments, a system or device may include one or more processors and may be configured with instructions stored on a computer-readable storage device.

What is claimed is:

1. A system for identifying manufactured parts, comprising:

a server configured to store test data for a plurality of manufactured parts, the plurality of manufactured parts